SEQUENCE LISTING

<110> Altar, Anthony C.
       Laeng, Pascal
       Young, Theresa A.
       Charles, Vinod
       Bukhman, Yury
       Jurata, Linda

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atgttccatt tgtaggacca gcttgacgtg cccatcctga cattgtatgc cacaagagct     2520

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tagtaccaga gaacacctgg gaagtgtgag aattcctgca gctgggacca aaatgtcttt     180

catagatcct tatcagcaca taatagtgga acaccagtat tcccataagt ttacagtagt     240

ggttctacgt gccaccaaag taaccaaggg gacctttggc gatatgctgg acactcctga     300

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gaacataaaa gagaacatga agaaacttt gggtccaaaa aagagcgagg ggctttattc     720

cacacgtgat gtgcctgtgg tggccatttt gggttccggc gggggtttcc gggccatggt     780

gggattctcc ggtgtgatga aggcgctcta tgaatcaggg attttggatt gtgcgaccta     840

cgttgctggt ctgtccggct ccacatggta catgtcaacc ttgtactccc accctgattt     900

tccagagaaa ggtcctgagg agattaatga agagctaatg aaaaatgtta gccacaaccc     960

tctcttactt cttacgccac agaaagttaa aagatatgtt gagtctttat ggaagaagaa    1020

aagttctggc cttcctgtca cctttactga catctttgga atgttaatag gagaaacact    1080

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aaagattcat gttgtagaca gtgggctcac gtttaacctg ccgtatccct tgattctgcg    1860

acctcagaga ggtgtggatc tcatcatttc ctttgacttt tctgcaaggc caagtgacac    1920
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17

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caacatcaac ttcagaaagt acaaggcccc aggtgttctg agggaaacca aggaagagaa      2160

agaaatagct gactttgaca ttttcgatga ccccgaatcg ccattttcaa ccttcaactt      2220

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caacattgat gtgataaagg atgccattgt tgagagcatt gaatacagaa gacagaaccc      2340

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aactcagtaa aaaaaagctt cccattgtgt gtgaatgtta ttctgaacta gatttgttca      2760

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<213>    Rattus norvegicus

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gccaaggccg caccgcccgc ctgcttcccg ccgccgcctc ccgccgcact caaggccgag       180

ccgggcttcg aacccgcgga ctgcaagcgc gcggacgacg cgcccgccat ggcggccggc       240

ttcccgttcg ccctgcgcgc ctacctgggc taccaggcga cgccgagcgg cagcagcggc       300

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gccgcgcccg ccgcctgctt cgcggggccg ccggccgcgc cgccaaggc caaggccaag       420

aaggcggtgg acaagctgag cgacgagtac aagatgcggc gcgagcgcaa caacatcgcg       480

gtgcgcaaga gccgcgacaa ggccaagatg cgcaacctgg agacgcagca aaggtgctg       540

gagctgacgg cggagaacga gcggctgcag aagaaggtgg agcagctgtc gcgagagctc       600

agcacgctgc ggaacttgtt caagcagctg cccgagccgc tgctggcctc ggcgggtcac       660

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18

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atgtttaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaa             1194


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cactcatcaa atactttgca gagacaattg ggccattgca gaacttcaca gcctggcctg     180

atgacttgct gatcagcaca tacccaaagt ctggtactac ctggatgagt gagatcctgg     240

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taccccttcct tgagttcaaa tgtccaggggg ttccctcagg tcttgaaact ttggaagaga    360

caccagcccc acggctcctt aagacacatc tgcccctgtc cttgctccct cagagtctgc     420

tggatcagaa ggtcaaggtg atctacattg cccgaaatgc aaaggatgtg gttgtctcct     480

attataactt ctacaacatg gccaagctgc accctgatcc aggcacctgg gacagcttct     540

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ctgtggattc cattgttcac cacacatctt tcaagaaaat gaaagagaac tgcatgacta     780

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gggatgtggc tgaggcagag ggttttatca acgcatgtca ggaaagcaat cagtcccaac    1140

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tgaaagaata aatgccactg ggaaatg                                       1227
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gtcatgaaaa ccttcacgtt gccagcatcc gtcctcttct gcttccttct actcatccgg   240

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cataatgggc aggtagctga ggacgcagtg tcccggccaa aggatgacag cgtcccagag   360

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tccgtgcgca gtcagaccca tagcctcccg gcatcagaaa tccaagcgtc cgctgtggcg   600

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catcttggtg agactttgac acccttatcc aaggcgtacc aaagtctaag tgccccccttc   1020

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20

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cccgcatcct cccgccgccg tcacttccat cacgcgttgc cacctgcgcg ccaccatccc    1920

gatctggagg cccaggccag gcgcgcgcag gaggaagcgg acgcggagga gcgccggctg    1980

caggagcagg aggagctgga gaattacatt gagcacgtgc tgctgcaccg cccgtgaccc    2040

gcccctgcgc gcccgctccc aactgcgcgc gccgccacgc ccccctccgt gtcgctcctc    2100

ctccctctcg gtgtttgcat gcgccccggc tccgcccctc ggctgccgcc cggccccgcc    2160

ccacaaggcc ccgccccggg ttctgtcagg accagacctg tcagacttct ttggggtctg    2220

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ccttctccaa attgctgtga acttacccac atcttgccct tctgttgtaa atacccctca    2460

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<212> DNA
<213> Rattus norvegicus

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<223> where n may be a or g or c or t/u, unknown, or other

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ggattcagtg atggccagga agcccggcca gaagatattg gctggttaaa tggttacaat    180

gaaactactg gggagagggg agactttcca ggaacttatg ttgagtacat tggaaggaaa    240

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cagtttgccc ctcctgatgt tgccccgcct ctccttataa agctcctgga agccattgag    420

aagaaaggac tggaatgttc aactctatac agaacacaga gctccagcaa ccctgcagag    480

ttacgacagc ttcttgattg tgatccccc tcagtggact tggatgtgtt cgatgaacac    540

gttttagcag atgctttcaa acgctatctc gccgacttac aaatcctgt cattccagta    600

gctgtttaca atgagatgat gtctttagcc caagaagtac caagctccga agactacatc    660

cagctgttga agaagctcat taggtcgcct aatatacctc atcagtattg gcttacgctc    720
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21

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cgacagccag caccagcact gcccctaaa ccacccaagc ccacttctat agccaacaac       960

agcatgaaca acaatatgtc cttacaggat gctgaatggt actggggaga tatctcaagg     1020

gaagaagtaa atgaaaaact ccgagacact gctgatggga cctttctggt acgagatgca     1080

tccactaaaa tgcacggnga ctacactctc acactaagga aaggaggaaa taacaaatta     1140

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gtggttgaat taataaacca ctaccggaat gagtccttag ctcagtacaa tcccaagctg     1260

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cccaaaccac gaccatgatg ttctcgggtt tcaacgcgga ctacgaggcg tcatcctccc      180
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gttttccatg aaaacgtttt attgtgtttt caatttattt attaagatgg attctcagat   1980

atttatattt ttattttatt tttttctatc ctgaggtctt tcgacatgtg gaaagtgaat   2040

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23

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<213> Rattus sp.

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tcagtaaatg gcacaaatac atcactgaag ttctcagtcg tcacctacaa gtcagtgtct   240

gagctatgaa gtagacctgt tttataagtt acacactgag tagtgttccg aactgtcctt   300

cctcacttcc ataagagaag ccaaatcttt tactgctatg gggacaaagt actatccata   360

aactggagaa gaaggctcac cttcctctcc cagtacctga acaacagaac agtgtgcaca   420

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taacaataat aattttt   617

<210> 25
<211> 7204
<212> DNA
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46

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<213> Rattus norvegicus

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47

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<213> Rattus norvegicus

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49

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<213>   Rattus norvegicus

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<400> 42

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52

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53

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56

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57

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58

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73

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gctgtagtgt gagttataca ccccagccct ccctggtcca atattttttcc tcgagaacaa   2040

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caatggggaa actgaggcca agaagggaaa gttaattctc agcagcactg tctctatggc   2160

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gtatagcagg ttaaacttca tctaaccgtg tcttctctct ttccacagat ttgtcaccaa   2340

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<212> DNA
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gcggaggcgg ccgctgaggg gagtgtgagg aggcagcggc ggccctggga atgtgaggcg   180

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85

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<212>   DNA
<213>   Rattus norvegicus

<400>   69
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tctaaaacaa agaaggccac cagtgcagtg gacaaactga gggaaatgca gaagttcttc       240

ggtttgccgg agactggaaa gctgtccccc cgtgtcatgg agataatgca gaagcccagg       300

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cttgtactgt ggatgggttt tgcacatccc tctgagggtc attttgatgg aatgagtctg       960

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86
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<211> 1912
<212> DNA
<213> Rattus sp.

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87

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89

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<213> Rattus sp.

<400> 72
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gcgtctcttg ctgtttgttg ttctatgagg aaggggcacg ttccggtctc gatccggact     360

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90

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<211>  543
<212>  DNA
<213>  Rattus sp.

<220>
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<223>  where n may be a or g or c or t/u, unknown, or other


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tgt                                                                   543


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99

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<212>    DNA
<213>    Rattus sp.

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cgggctgatg ggcgagcctc agccccaagg tcccccaagc tggacagacg agtgcctcag     180

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101

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aatttaacta atttaaacca gcagaaaagt gcttagaaag ttattgcgtt gccttagcac    1800

ttctttcttc tctaattgta aaaaaaaaaa aatagaaaag aaaagagaaa aacaacaaat    1860

tgcacaattt gagcaattca tctcacttta aagtctttcc ctctccctaa agtagaaacc    1920

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<210> 84
<211> 1017
<212> DNA
<213> Rattus norvegicus

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gaattaagcg aaaacagaat ctcaggggac ctggaagtat tggcagagaa atgtccgaac    360

cttaagcatc taaatttaag tggcaacaaa ataaaagatc tcagcacaat agagccgctg    420

aagaagttag agaatctcaa gagcctagac ctgtttaact gtgaggtgac caacctgaat    480

gcctaccgag aaaacgtgtt caagctcctg ccccaggtca tgtacctcga tggctatgac    540

agagacaaca aggaggcccc tgactctgat gttgagggct acgtggagga tgacgacgag    600

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<211> 614
<212> DNA
<213> Rattus sp.

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aaggataaaa taactgcgtg ggaagtgaca tttattgtac aaatggttaa taaaaagaca      360

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tctaaccggt gtatccaagt caccacgaac accccatttg attattctgt aactcagcct      480

ccaggagctg gtggtcttgc aataaataca ggcaaagcga ttacaataga acgtgcatac      540

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<210> 86
<211> 481
<212> DNA
<213> Rattus norvegicus

<400> 86
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gactgtgcta gcaaaaattc cagtctctta ggatgtaaga tattttatc acaatgcatt       180

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<211> 458
<212> DNA
<213> Rattus sp.

<400> 87
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103
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aattacactt attttatttg tgtgtacgag tgtatgggtg gggatggggc aaatgccaag      360

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120

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aatcttccat gttggctgtg agcatagtgc cttactctgg cttcttcata catgtgcaca   2160

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tgggtgggtg ggctgaggga gggtggtggc agagatggct ggaagttgac ctggagcttt    2280

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121

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<211> 423
<212> DNA
<213> Rattus norvegicus

<400> 92
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aagaaggtga tttttctcag taccttagta taacttaact gttgctaaaa ctttgatatg   180

tctgtttcca gtctcctttt tccgcatatt attttgattt tctgttattt catgtaattt   240

tatcatatat gacatacatg tatacacata catacttaat atctgggcct atgtaagtgg   300

taactagttt gcatgtggtg aggaaaatct ggtttaagga ctgagtagac aaggggttaa   360

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cac   423

<210> 93
<211> 1030
<212> DNA
<213> Rattus sp.

<400> 93
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gagtcttcag ccagacctgg aggggaaagt caccaggatc agactctctg agaactgcaa   540

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aaaataataa aatccagtaa gcacggaagt gctcgatgtc cactgaggct ctctcttgat   660

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<210>   94
<211>   1616
<212>   DNA
<213>   Rattus norvegicus

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atctcactaa aggcagcatt cgtcaaacac tacggcttgc ggggcattgg catgtggaac   1020

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tactgttaaa aaccaatagg gattttaaa aatgtataac tagtagacaa gtgaagatac   1500

tggagaaggg agtgcacatg accatagtgt gttacacaca tgtatagact atcatagtaa   1560

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123

<210> 95
<211> 574
<212> DNA
<213> Rattus norvegicus

<400> 95
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cgcctttggt gcatgttgag cctgggcaag gatgggtaca tagggagata caggtgggat   120

gaggagcaaa gagggagggc gctgcctact gagactgtgc tcaactgttc tcccagaaga   180

agttgttaca agccactgtg agagcagcca ccagcacaac aaactcctgg aagtccactt   240

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ggacatccag gaagctggag agttcagttt gtagcaggtc tttcagctcc ttcttgctca   360

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tggcggtctc cagctcagag cccatttcag cagcacacgg ttggcctcgg cctgacgtcg   480

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<210> 96
<211> 1312
<212> DNA
<213> Rattus norvegicus

<400> 96
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gcttggtgaa gaagctcaag aagacggggc agttggacga gctggagaag gccatcacca   180

cgcagaacgt gaacaccaag tgcattacca tccccaggtc actggatggc cggctgcagg   240

tatcccatcg gaaggggctc ccccatgtca tctactgccg cttgtggcgg tggcccgacc   300

tgcacagcca ccatgagtta cgggccatgg agctctgtga gttcgccttc aacatgaaga   360

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cagtgttggt gccacgccac accgagatcc cggccgagtt cccccctctg gatgactaca   480

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accagggctt tgaggctgtc taccagttga ctcgcatgtg caccatccgc atgagcttcg    1140

tcaaaggctg gggagccgag tacaggagac agacagtgac cagcaccccc tgctggatcg    1200

agctacacct gaatgggccc ttgcagtggc ttgacaaggt cctcacccag atgggttccc    1260

ccagcatccg ctgttccagc gtgtcttaga gacactggga gtaaagggat cg            1312
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<210> 97
<211> 1200
<212> DNA
<213> Rattus norvegicus

<400> 97
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gcccgagcct cctcgaggca gccctggacc gagccttgcg cctggccccg tccgagagaa    540

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tttgtaagaa taaagaagca tttaaattgc aaaaaaaaag aggcaccagc tctgactggc    1140

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<210> 98
<211> 593
<212> DNA

125

<213> Rattus sp.

<400> 98
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<210> 99
<211> 281
<212> DNA
<213> Rattus sp.

<400> 99
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ccgcaagtgc gttcgaagtg tcgatgatca atgtgtcctg caattcacat taattctcgc   240
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<210> 100
<211> 573
<212> DNA
<213> Rattus sp.

<400> 100
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127

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ctggccacgg tgatgctggg tggctgatga aacttaagct cagggtcagt gggacctggc   2760

actgcaggtc aagaggacgc ctgggcccct tcctgaccca ggcagctctg caggagctgg   2820
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128

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aggttggcaa ggctccatct tcccttccag gggcttgggg atgctaagtt gctgtatcca    3060

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tcacgtgcca caagatgacc tcgccaatcc cagtgacctt gctcatccac tatcaactga    180

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ctgccctgac tagaaatggt ggcaagtttg agaagcgtgt ggacaatgtg acacctagga    360

tcacctcggc caccagggga ctgtccccaa ctgccctggc aaagcctgag tcagccacag    420

tggaagacct tactttggaa ccgactgcta tttcccagga ggcccgaagg cccatgggga    480

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aagctactga atcccccccc actatagccc tatctactca agcgtccacc acttcaagcc    720

ccaagcagaa tgttgggtct gaaggccagc ccccatgggt ccaggagcag gactccactc    780

cagagaaatc tccagggcct gaggagacaa acccagttca tactgatatt ttccaagaca    840

gaggacctgg cagcacagtc catccctcag tggctcccac ctcctctgaa aagacccca    900

gcccggagct ggtggcctcg gcagccagg ctcctaaggt agaggaaccc attcatgcca    960
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gagctgcctg cttgcctgcc tgtgtccaga gtgtgattca gacagctgtc tggggacccc  1260

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130

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gggagccttc aagggttggg acacccatgg ttggactttg ttggttcccg cgcctcgtgg    2940

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tctgtgccat tttgtatttt actaataaaa ttttaaagtc ttgt                      3044


<210>  104
<211>  684
<212>  DNA
<213>  Rattus sp.

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tcttttacaa ggtatatggt ccctaacatc catgcagaaa atatcaggtc aagtgcttta     180

ctgtcccagt gtccagtctg gtgacccata tcagaggcag ggcattcgca gagatattct     240

cattccgtgt cttgagtttt ctttcgaaga aagtatttta cgagtcatat acaaattaaa     300

caagaagtcc aacgagggcc ctttattacc accaggggg ggaaggggta acttacaatc     360

ttataaccaa aggcaaaaac agcacaagaa cagtttattc ctgcagatgc cgcagccctg     420

tgcaatcccg cctcggctgc tgctacagcc agaagtcaga gccccgcagt gaaggctgca     480

cgggaactct aggctggatt acccacacag aacaagtcgc tcctgccccc gtacgttgga     540

agtgctgctg gattttctgc ttgctcagtg gataacagtg cagctgaaca tgaggggctt     600

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cacacacaca cacacacaca caca                                            684


<210>  105
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<213>  Rattus norvegicus

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attgttaaga ttcccgtttg ctgggttttc ctccctcaat cgtgctctcc cgcggctgcc     120

tggggactgg ctcggcgaag gaggatggag agggggctgc cgttgctgtg cgccacgctc     180

gcccttgccc tcgccctggc gggcgctttc cgcagcgata aatgtggcgg gactataaaa     240

attgaaaacc cggggtacct tacatctccc ggctaccctc attcttacca tccaagtgag     300

aaatgtgaat ggctaatcca agctccggag ccctaccaga gaatcatgat caacttcaac     360

ccacatttcg atttggagga cagagactgc aagtatgact atgtggaagt gatcgatgga     420

gagaatgaag gtggccgcct gtgggggaag ttctgtggga agatcgcacc ttcacctgtg     480

gtgtcttcag ggccatttct cttcatcaaa tttgtctctg actatgagac ccacggggca     540

ggattttcca tccgctatga aatcttcaag agagggcccg aatgttctca gaactataca     600
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131

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gcacctactg gagtgataaa gtcccctggg ttccctgaaa aataccccaa cagcttggag      660

tgcacctaca tcatctttgc accaaagatg tctgagataa tcctagagtt tgaaagtttt      720

gacctggagc aagactcaaa tcctcccgga ggagtgttct gtcgctatga ccggctggag      780

atctgggatg gattccctga agttggccct cacattgggc gttactgtgg gcagaaaact      840

cctggccgga tccgctcctc ttcaggcatt ctatccatgg tcttctacac tgacagcgca      900

atagcaaagg aaggtttctc agccaactac agcgtgctgc agagcagcat ctctgaagat      960

ttcaagtgta tggaggctct gggcatggaa tctggagaga tccattctga ccagatcact     1020

gcatcttccc agtatggtac caactggtct gttgagcgct cccgcctgaa ctaccctgaa     1080

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tattatgtca agacttacag agtagacatc agctccaacg gagaggactg gatcaccctg     1260

aaggagggaa ataaagccat tatctttcag ggaaacacca atcccacgga tgttgtcttt     1320

ggagttttcc ccaaaccact gataactcga tttgtccgaa tcaaacctgc atcctgggaa     1380

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ggagacagga actggatgcc agaaaacatc cgcctggtga ccagtcgaac cggctgggcc     1560

ctgccaccct caccccaccc atacatcaat gaatggctcc aagtggacct gggagatgag     1620

aagatagtaa gaggtgtcat cattcaaggt gggaagcacc gagaaaacaa agtgttcatg     1680

aggaagttca agatcgccta cagtaacaat ggttctgact ggaaaatgat catggatgac     1740

agcaagcgca aggctaagtc ttttgaaggc aacaacaact atgacacacc tgagctccgg     1800

gcctttacac ctctctccac aagattcatc aggatctacc ccgagagagc cacacatagt     1860

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acgacaccca atgggaaccc cgtggacgag tgtgacgatg accaggccaa ctgccacagt     1980

ggcacaggtg atgacttcca gctcacagga ggcaccactg tcctggccac agagaagcca     2040

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tggagggtgc tgaccagcaa gacggggccc attcaggacc acacaggaga tggcaacttc     2220

atctattccc aagctgatga aaatcagaaa ggcaaagtag cccgcctggt gagccctgtg     2280

gtctattccc agagttctgc ccactgcatg accttctggt atcacatgtc cggctctcat     2340

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tctctgaaac tgtatcaggt tattttttgaa ggtgaaatcg gaaaaggaaa cctcggtggg     2520
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attgctgtgg atgatatcag tattaacaac cacattcctc aggaggactg tgcaaaacca    2580

acagacctag ataaaaagaa cacagaaatt aaaatagatg aaacagggag cacccagga     2640

tatgaagaag ggaaaggcga caagaacatc tccaggaagc caggcaatgt gcttaagacc    2700

ctggacccca tcctgatcac catcatagcc atgagtgccc tggggtgct  cctgggtgca    2760

gtctgtggag ttgtgctgta ctgtgcctgt tggcacaatg ggatgtcgga aaggaaccta    2820

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ctgaacccac agagtaatta ctcagaggcg tgaaggcacg gagctggagg aacaaggga     2940

ggagcgcggc aggagaacag tggaggcgca gggactctgt tactctgctt tcactgtaag    3000

ctgggaaggg cggggactct gttactccgc tttcactgta agctcggaag ggcatccgcg    3060

atgccatgcc aggctttct caggagcttc aatgagcatc acctacagac acaagcaggt     3120

gactgcggta acaacaggaa tcatgtacag cctgctttct tctcttggtt tcgtttgggt    3180

aatcagaagc cagttgagac caagtgtgac tgacttcatg gttcatccta cttggccccc    3240

tttttcctct ctttctcctt accctgtggt ggattcttct cggaaactgc aaaatccaag    3300

atgctggcac taggcgttgt tcagtgggct ctttcgatgg acatgtgacc tatagcccag    3360

tgcctagagc atattagcat aaccacattt caggggacac caatgtccgc ttttgcatcg    3420

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<211>    528
<212>    DNA
<213>    Rattus sp.

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<223>    where n may be a or g or c or t/u, unknown, or other


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acagggcaga agctaatgct ggggtcacag agagtgcatc tgtgtagggg atttggcagg     120

tagcctgcag tctggtcact cttgaggaca gcattttgct agctcagcca cccagccaca     180

actcagccgg gcccaggaag cgacccagcg tcattgctat gggtcgttta cacaaaccac     240

accagcatca attaacactt ttttctgtac ctgatgccac agtttaaaga aaaaacaaaa     300

caaaacaaaa caccaacaca cgactataca tcatcacagt tgggcagccc atgggtgagg     360

tttccacagc tactccacaa aggtacccat cctgcgtcag gagatccagc accttgccac     420

agactgcagc tcacaggtgc ctgtacactg aatattttgg tctaaaattt gacctttatg     480

ggatggggag agcnctcttt gttcttaaac ctggatatcc ttcaagtc                 528
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133

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<211> 437
<212> DNA
<213> Rattus sp.

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cttgataagc agttcaactc tttgggcaaa gtcactagct ccttatccgaa ttagaataca   180

ggacacagaa taagtcaaga caatccatga cattttatt gagcctttag tttatgaggt   240

aaaggaaaag cagctctctt gaatacttta catagctgta ggaaaatatt tgagacttaa   300

agggagttac aggggattat gtttctcaaa agttgagatc aagtaaacaa gctttaaatt   360

gtttaaattt tccagttgat cttttccttac aatagtaaca agctcgaatt agccacatta   420

ggttttatg tttgcag   437

<210> 108
<211> 385
<212> DNA
<213> Rattus sp.

<400> 108
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agggctgaca tctcggtacc tgttccggtt tttgttctta ggaagtttcg ctattctgca   180

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cctcggccgt ccgccgcgct aggccgcgtc gctccgcgtc tcgaggcccg tcgcccgcca   360

cctcgtgccg cctcgtcctc gtgcc   385

<210> 109
<211> 646
<212> DNA
<213> Rattus sp.

<400> 109
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tttaacacaa tgagataaac actgatagac tgaaggacta aggtttgcag ctactttatt   120

tacaagtata catttaacac aaggagataa acactgatag actgaagcct aactaatagt   180

actgtaacgt gtaccatttt gatgactaca ttattttaaa caacaaacta cactgaaaaa   240

ttaatgccga taaaattctt ggtcataata ttaagaaata caatatataa attgaaaata   300

tgattgttta aaatttgaaa atggaagtga actcatttgg acagagtcag acgttaacat   360

aatctgagag gggaggacct ctgacccaaa tgacatcgtt caggttaaca gaacaaaaca   420

134

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gaagcctagt tttatcttca aggatgacag gcagcttgct tcctcaggtg gaatacactc    480

aggctctgca tcacgcgcgt cacatcaccg agcacgaaga cttcccttgt gaagccgctc    540

cgtcaatctt ttctgcttcc aaaattatcc ttcgaaaaac atccacagca gtctgatttt    600

cttttgcaga agattccaaa aaagctgcat tccaagattc tgccaa                   646
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<210> 110
<211> 484
<212> DNA
<213> Rattus sp.

<400> 110
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caggctggag gacagtgttg cccatctagg gggcatgggt gtggccccac gtaccaggga    120

caagccacgg gttgtggggc agctgtagag aagagtgtaa ctgagtccag ccaaagcctc    180

cctcatgatg cagagccgcg gctgtggcca gcctcgcatg ctggttgaaa agggacctgc    240

caactgcctg tggccagctg tagagtcaca tgagcaggta gcagtggagc tggctcaggg    300

gaaggtgcca gggacctggg aatgtccact cttcagggcc tttgtgcttg gtcttcaaca    360

gggctgagct gggtctgtgg tcccatggga agtgtacacg ttcatgcctt gtgcacttct    420

gcatgagcag caggtgccag gtgtctccat atgctgagct ggctgtgctt gcagcctcgt    480

gccg                                                                 484
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<210> 111
<211> 711
<212> DNA
<213> Rattus norvegicus

<400> 111
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aggatggaca cggtgggcga tgccctggag gaagtgctca gcaaggctcg gagtcagcgc    120

accataactg tcggcgtgta cgaggcagcc aagctgctca cgtagaccc ggacaacgtg     180

gtcctgtgcc tgctggctgc ggatgaagat gacgaccggg acgtggctct gcagatccat    240

ttcaccctca ttcgtgcttt ctgttgcgag aacgacatca acatcctgcg ggtcagcaac    300

ccgggtcggc tggcagagct gttgctactg gagaacgaca gagccccgc tgagagcggg     360

ggcctggcgc agaccccgga cttacactgt gtgctggtga cgaacccaca ttcatcacaa    420

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cagtgggtgc cagtgattaa tctccccgaa cggtgattcc ccgaacggtg atggcatctg    540

aatggaaata actgaaccaa attgcactga agttttgaaa tacctttgta gttactcaag    600

cagtcactcc ccacgctgat gcaaggatta cagaaactga tgtcaagggg ctgagttcaa    660

ctacaggagg gctaggagat gactttgcag atggacagag aggtgaaaat a             711
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135
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<211> 608
<212> DNA
<213> Rattus sp.

<220>
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<222> (1)..(608)
<223> where n may be a or g or c or t/u, unknown, or other

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tattgtctct cgcactcccc tccctttgct ctctttcatt ccctttagca aatttcaatt   360

gtcctaggag aaaaggttgc tgtcatgtct gaaagacccg ttgaggtgct gaaggagttg   420

ctgacccctg cagactggaa ggtgctgacc tgggcaggga aagcaggtgg gacggaggca   480

taggtggtgg ccaccgaggg cgatgggaag ccactgtgcg caggagacgg gtaggtagag   540

gagcccggag aggagtaaga ggtgggcact ggggatggaa atgaggtggt ggcggnggat   600

gggttaga   608

<210> 113
<211> 539
<212> DNA
<213> Rattus norvegicus

<400> 113
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ggaaggcgcg ggatccagga cgtgctggtc acccccaaac cccaggccac ccattatcgc   120

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aagatggacg cgagccacaa gctgcactgt gaacccggca ctccgcgccg atgccaccgg   420

cccgtgggtc tctgaagggg acccccccac taatcggact gccaaatttc accggtttgc   480

ccagggatat tatagaaaat tatttgtatg attgatgaaa ataaaacaca cctcgtggc   539

<210> 114
<211> 292
<212> DNA

<213> Rattus sp.

<400> 114
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aaaaggcctg gttttтctca atacaccttt aacggttttt aaattgtttc atatctggtc   180

aagttgagat tttтaagaac ttcattttтa atttgtaata aagtttacaa cttgattttt   240

tcaaaaaagt caacaaactg caagcacctg ttaataaagg tcttaaataa ta   292

<210> 115
<211> 2299
<212> DNA
<213> Rattus norvegicus

<400> 115
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catgacaacc ctggatgaca agttgctggg ggagaaattg cagtactact acagcaccag   180

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ttccacgcct gcggaggctg agctggcagg cgaaggcatt tcagtcaata caggtccaaa   300

aggggtgatc aatgactggc gccgcttcaa gcagttggag acagaacaga gggaggagca   360

gtgccgggag atggagcggc tgatcaaaaa gctgtctatg agctgcaggt cccatctgga   420

tgaagaggag gagcagcaga acagaaggga cctccaggag aaaatcagtg ggaagatgac   480

tctgaaggag tgtggtatga tggacaagaa tttggatgat gaagagtttc tgcagcagta   540

tcggaagcag aggatggacg agatgcggca gcagcttcat aaagggcccc aattcaagca   600

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cacccttatc atggttcata tттatgaaga tggtgtccca gggactgaag ccatgaatgg   720

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gcagtaaagc gatttctaat tatatagaca ggaagctggg ttcttgagct gтттacatct   1260

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137

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tgtcttgaaa attgtcttct gatgacctca gaattccacc aggtctgaga gtagaattcc    1380

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gctcatcagc atcttttcct ctgttattta gcaaggtaat gctttgttta acctttttaa    1860

ctttttaaaa agcttttttt gcctattaga aaaaaattca tatttactag aggaaaattg    1920

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ttttggtacc attcatatat agggtttttt ttttaatgta ttctagggtt ttttttttat    2040

ggattcatag gctttggttt gtctttaaat gacattggga tcattctgag catactgtca    2100

gatagtgtga tcagttacta acagaagttt ttcatgctat taaatactct tctgtaatat    2160

tttaataact gttgatattc cattgatttg ctgaaatctg gtgtttgggt tttagaaaga    2220

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taaaaattaa gttaaaaag                                                 2299
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<210> 116
<211> 1739
<212> DNA
<213> Rattus norvegicus

<400> 116
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gctgagcact gagcggcgct cagaatggaa gccatcgcca aatatgactt caaagctact    180

gctgacgatg agctgagctt caagaggggg gacatcctta aggttttgaa tgaagagtgt    240

gatcagaact ggtataaggc agaactcaat gggaaagatg gcttcatccc caagaattac    300

atagaaatga aaccacatcc gtaagtcaga ctctatggtt cccctaagca aggggtttgc    360

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gacccacctg cctctgcctc cctactgttc cagcatgccc agattggttt ggttttgtga    540

gataggctta aaagtcttaa taaagacatc aaaatcaaaa taataatatt gaagaaatca    600

aaatcaattt aaatggcaaa tatatgttag attactggac ctctgtcctt ggttcagaat    660

gccccttgcc tgcgatctct gcagcctaag attgggagcc agcgtacagc cagtccaggt    720
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138

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cagaaggtca ggagacagtt tgtaaaggag gaagttttct ttctttctct ccctttgttt   1500

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<210>    117
<211>    2376
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<213>    Rattus rattus

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caggagcggc ccgataccca ctcccgacca acccgcgacc gacccaggga cccactccgg    180

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agagataaag aacgagttta aggacatcga agagatcaaa acccagaagg tccgtatcga    660
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gctgtgctat ctgttcatta ggtattgctc agggaagtcc aaaagaccag tctaatgcat    960

tgcctggctg ttaagcaaag atgagggaga ggatgaggca acctgtgctt agttatcaga   1020

gttcagctac cagcatctcc cgggcaaaca ttcccacctt aaatgccgcc atttgaagtc   1080

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taaaatgatc tggaaagcat tatacattcc tcctatttca gaggttcggt ttgtgatgtg   1560

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ggttatgcct acaactgccc cctgccatga gcctaactca gcccccctcc accccagct   1860

cgtctactct gtagctgtgg gatgtggcag tcagtatcaa aagacttcat gagtttgctt   1920

gggaatttca ctgccatggt acaatttaat ggtgcagaaa caagatgggg tggttttcaa   1980

agaaccgatg aaacttctag actctaaatc ctgttgatta aaactgagtt tttctacttt   2040

gaatgtctgt ttgcctccct tttcagcatt gccttctaaa ctggaaacag aaatgttgat   2100

atttggaaaa aatagaagaa actagtttag gtcaatgtgt aacttttcta ggacaagttg   2160

aaccttagca ttgtcattct gcctgatgtg ttgtccacaa gatgacagtc aacaaatcca   2220

acaggggaca cttcttcctg ccaagaatgt cgttgggaag ccattctgta acaataaata   2280

agagttgtgg tttaaagtct acactatttt acctaatgaa gaacttattg ctgatgttca   2340

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<211>   623
<212>   DNA
<213>   Rattus sp.

140

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ttttctaaag catgttttaa ccttcattta gttcatacta aaaataagct ttaaatagct   180

caaataatgt cattcagcag tttaaactga acagcttgtt gggacatggc agcggtgtcc   240

ctctgttagc aagcaccttc tctttgtgct tatctataca agataaacaa tcagaggatg   300

taaaaattga acacaagcta cacgtctcac tgactctcag ggcagtgagg cagccagctg   360

tgagttttct aagcaggaag atgctgaagt gacctctggc attaagacgt tctgtgctat   420

tggtcagaag tgtttcactt aaaaagcaaa caatccccag gaaatactga ataggaacca   480

acaacacaag accagcttgt gttgtaattt aaagtctcaa aaacaaaaca acatcccata   540

caccccacga taactctcaa tcatggctaa tcactgggct ggtctataaa acttataccc   600

aacactgacg gccagcacca ctc   623

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<211>   365
<212>   DNA
<213>   Rattus norvegicus

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aaaataactc atgtttacat catatttata gacaagctgt acaataaata cataaatgca   120

ttcacagtct gtgcttcagt catcctcctc ctcctcttca tcgctgatca catacttctt   180

atgctttta ttggccttga catcgtcctc tgctttcctc ttcccagaag actcaccttc   240

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gtttt   365

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ttaaattttg tgtgtagttg gattttttgg aagctgaagg tatccatctg cagacattga   180

ggcccaagtt gaatttggat tcgagtggat tcttaacact tctgcctgtg ctgaagagaa   240

gcttcataag gaacaagcaa gttgaataga gaagatagtg atcaataaga ggcatttagt   300

ggtcttttta atgttttctg ctgcgaaaca tttcaagatt tattgatttt ttttttttcat   360

tttccccacc acactcacac acgcacgctc acactttta tttgccataa tgaaccgtcc   420

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tgcgactctc aacaagttca ccgaggaact caagaagtac ggagtgacaa ctttggtccg      540

agtttgtgat gctacctatg acaaagctcc agttgaaaaa gaagggatcc acgttctaga      600

ctggccattt gatgacggag ctccgccccc taatcagata gtagatgatt ggctaaacct      660

gttaaagacc aaattccggg aagaaccagg ctgctgtgtc gcagtgcatt gtgttgcagg      720

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agatgctgtt cagtttataa gacaaaaaag aagaggagca ttcaattcca aacagctgct      840

ttacttggag aaataccgac ctaagatgcg attacgctcc agagatacca cgggcactg       900

ctgtgttcag tagaagcaga ggaaggccgg ctggatcgtg gcattagagg gaactctggg      960

tacctggaaa tgtgaatctg gattcttacc tgtgtcatca aagtagtgat ggattccgta     1020

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aataaaatgt ttaag                                                      1095


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<211>   516
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<213>   Rattus sp.

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tgctgggctg tccccgggac caaagaggaa aagagtgaca tagaaactga agcaaaggaa      120

gcttagtcac actcaggtga gggtgacagc tcctcctgga ttttgtttcc atttattaaa      180

aaaaaaaaga aaagaaagaa agaaaaagcc accccctcac tcccagccca ttcctcacag      240

ccagggtcag aaagcagcat cagtgaggcg ggttcctcac ctctggttat ctctggccca      300

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gaagtctcta cctggacccc ccagaggcct gggagcaccc ccctcctccc aggaaaggga      420

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cccatctcga ggacggcagg aagtttattg caccag                               516


<210>   122
<211>   484
<212>   DNA
<213>   Rattus sp.

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aggcaggtga ggtttctgga agacagatac tgagtacaaa aggggcggga gagccatgcg      120

acgatcattg taaaaataca gtacgttata tacatatttg caccatcgac tttcaactca      180

gaaatactat ttacacgttt gttacaatcc tggttagaga acaatctttc tttacgagtg      240
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tggc                                                                 484


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<212>   DNA
<213>   Rattus norvegicus

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gcccccgctc ctagagaggg tgacctttct gtttctcctt ctccttgttc tccagagggg    240

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<210>   124
<211>   569
<212>   DNA
<213>   Rattus norvegicus

<400>   124
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cacggaaata gtatacagag atatataaga accacaagga aaaaaaaatc ccaagtcccg    180

taaggttgtt caaatatgaa aagagtaaaa tcttaacact ggagaacttg ctatggtgaa    240

cccaaaagat acaatataca aaagagtcaa ggaaaaaaaa aaggcgtagg tgcgaagtaa    300

gttttgattt ccttcttcca acatgctgta aatcgccttg gagagaccac ggacccagcc    360

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accgacaatg cctgcttaaa tgagctctga ctcacttcct catttccttt tttctgccag    480

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<210>   125
<211>   486
<212>   DNA
<213>   Rattus sp.

<220>
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143

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gacagtcaga ccacaaacca caaaacaaca gtcagacaac aagcacttta cagcgcccac   120

cacagtctgt acactaagaa cagtcctaag acggcatccg ccttctcctt cttcaatcag   180

gatgaagctg tcactgacat tccagtaaca tgctgacgtg gttgtcattg tttcaagtca   240

caccaaactg acatcagaga gtacaaggtt ctttaatcaa acaaaaaatt agtcttattt   300

aaattaagag aaattcactt aaactaaaaa taatttattt gagctgagag ttttaaatac   360

ctaacacatt ttttcaggga aatgttggta ccatctctga gccagctttc cttcctccag   420

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atctct   486

<210>   126
<211>   2452
<212>   DNA
<213>   Rattus norvegicus

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aatgcatgaa gaacaacctt ccatccaatg acagctccaa gttcaagacc acagagtcgc   420

atatggactg ggaaaaagtc gcatttaagg attttttcagg agatatgtgc aagctcaaat   480

gggtggagat ttctaacgag gtaaggaagt tccgtacttt gacagaattg atccttgatg   540

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agcttccaga gaagaagaag atgaaatata ttcaggactt ccagagggag aaacaggagt   780

tcgagcgaaa cctggcccga ttcagggagg atcaccctga ccttatccag aatgccaaga   840

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agctaaacat cagcgaggaa ggtatcacca agtctaccct cactaaggcc gaacgccagc   1020

tcaaggacaa atttgatgga cgacccacca agccacctcc gaacagctac tccctgtact   1080

144

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gtgcagagct catggcaaac atgaaggatg tgcccagcac agagcgcatg gtgctatgca      1140

gccagcagtg gaagctgctc tcccagaagg aaaaggatgc ttatcacaag aagtgtgacc      1200

agaaaaagaa agattatgaa gtggagctgc tgcgtttcct tgagagcttg ccagaggaag      1260

agcagcagcg ggtcctggga gaggagaaga tgttgaacat caataagaag cagaccacca      1320

gtccagcctc caagaagcct tcacaggaag gtggcaaagg tggttcggag aagcccaagc      1380

ggcctgtgtc tgccatgttc atcttctcag aggagaagag aaggcagctt caggaggaac      1440

gacctgagct ctcagaaagt gagctgaccc gcctgctggc ccgcatgtgg aacgacttgt      1500

ccgagaagaa gaaggctaaa tataaggccc gggaggccgc gctgaaggca cagtccgaga      1560

ggaagcctgg cggagagcgt gaagataggg gcaagttgcc agagtcgccc aagagagctg      1620

aggagatctg gcagcagagt gtcatcggag actatctggc ccgctttaag aatgaccggg      1680

tgaaagcctt gaaagccatg gagatgacgt ggaacaacat ggagaagaag gagaagctca      1740

tgtggattaa gaaggctgca gaagaccaaa aacgatatga gagagagtta agtgagatgc      1800

gggcccctcc agctgctacg aactcttcca agaagatgaa gttccaggga gagcccaaga      1860

aaccgcctat gaacggttac cagaagttct cccaggagct gctgtccaat ggggaactaa      1920

atcacctgcc actcaaggag cgcatggtgg agatcggcag ccgttggcag cgcatctccc      1980

agagccagaa ggagcactat aagaagctgg ctgaggaaca gcagaggcag tacaaggtgc      2040

acttggacct ctgggtcaag agcctatctc cccaggaccg cgcagcatac aaagaataca      2100

tctccaataa acgtaagaac atgactaagc ttcgaggccc aaaccccaag tctagccgga      2160

ccaccctgca gtccaagtcg gagtcagagg aagacgacga tgaggaagat gatgatgatg      2220

atgacgagga ggaagaagaa gatgatgaga cggcgactc gtccgaggac ggtggggatt      2280

cttctgagtc gagcagtgaa gatgaaagcg aggacgggga tgagaatgag gatgatgacg      2340

acgacgagga tgacgacgag gatgacgatg aggatgaaga caacgagtct gagggcagta      2400

gctccagctc ctcatcttca ggggactcct cagactctga ctccaactga gg      2452


<210>  127
<211>  320
<212>  DNA
<213>  Rattus sp.

<400>  127
cagctttgaa ccctgaaact gcttgtggca ggttcagtta ctgacagcac aaattccatt      60

gagtctattc aaggattgaa tgacttcaca agccctggtc tcaggagatt aactttcata      120

ttggggtagt ggttcacttg agaatacaaa atcttcagat taactgatgt ccaaaatact      180

gtcttaaatc atgagatcca tcaattttta gtattgtcta gacctgcaaa tagaattaca      240

ttgtaaaatc tttttcagca tgtgttaaga tgtatgtgaa attttttgt ttaagtgtaa      300
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145

acttcatacc atactgtcag   320

<210>   128
<211>   2190
<212>   DNA
<213>   Rattus sp.

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aatctaccac gcttctgaaa tgttcagcta ttaaggggaa tgtcaatata tatatacagc   180

ccaaattagc gaagcccaaa ttagggaagc acatagcatg gcatacttga gaggttggca   240

aacaagaggg aagcaggtac tttctgcaaa aacagggact gtgcgccaca atgagaccgc   300

tgtgacctta cttcaaactg tgaaactgtg tgcagcagta ggatttggag tcttaaattc   360

agaaggagca gaaagaaaga gagttagacg tttgaattcc tggtgcttat gctgacgttt   420

tctctcattt gccagcatta aaatctcaag taaggtgtct cctgtgccag gacgtgtcag   480

gtagaccttt ctcagtgagc tggaatcctg ccttctgtgt catagagttg taagagcagc   540

agtttctacc catcatgctg tgtactcact gctgcagagc aagtgggagg ggccagagat   600

gggccgtccc caggggcgga tagcgcggta cacttaattc tcttctgcct gaaagcacac   660

ttccccgtaa gcgaatacag acagaacttt gattgagctg gtatctgacc gataggattg   720

cttctttgat gtacctcttt gacctagcta gcatttcagc tttgatactg cagaacgatc   780

ttttcaaatt ataatcattc tgatagagat atcttaatag acgtgctttt aaaaacaaaa   840

cggaaactac tgtcagtatg aatactgagc cagactggca ttcatagatt taacaacttg   900

tatttctaag attcttaact ctataaaagt aatatggctt ttagatatat aggataataa   960

tttcagtgag accgttatct ctttactcaa cattatgtta gggacagtat aagccaagca   1020

cttacctgtt acacattgga gactaaaacg actgccccca accttagtaa gtatgaaaac   1080

tagactcaca ttatttcatt tttaactgct aaaagtatgt ctatagaatt taaaatttaa   1140

gcactactat ttgtcctggc cacatttttc aaaaattaag ttaaaagtta ttaattatat   1200

acaggtgtgt atttctaata attaaaatac ctttcaaatc catggaatgt ctgcctttta   1260

aatgtaattt gggctttttt gtttgattct ttttcactta actagctgtt tatttgtaaa   1320

catttctttc cacgatttaa aaacacttcc aatcggcttt acttcctgat ttagcacttc   1380

ctattttgac ccttgggcat ctgttcttcg tttaattggt gtagaataat gataaaaatc   1440

ccaagctagt ctaaccaaac tgcattctta agagtactaa gtgggaatga tgcaaagttc   1500

atcaagaatt gaaaagaagc cggtctttgc actaaggaag acagcataat taagtcttct   1560

cgttgccatc tgagtaatat catgatatgg ggaccgcaga atccatctcc ggtgggatga   1620

tggtatagct ttcctagttc cagaaaaaat ctccttcaca ttttatataa taatttaatc   1680

146

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acaatgtcca tcgaattctt ccttaggcat tctttgtaac agtagtgtgc tgctctttaa      1740

aatattaacc tctgacacat gtgtgaacct cattccctgt ggtcactaaa atttcttccc      1800

cactgagcat caatctttag cagatttag gaaaatactg aattcttagt caggaaatat       1860

tttaggaata atcttgctaa cagtatatta agtaataaaa ttacccactc tatgtgtgtt      1920

tcattttttt taatttacat agacaatggt ttttataaag caatgatttc aatttttccc      1980

agctacccaa agtcctggtt aatttgtgaa cacaaatttt gttagccttc aagtttaaac      2040

ggtgctgaat tgtcttaact tgaatgtaaa aatggattaa ggcttatctc atgggacaca      2100

aacatgtccc atatgactgc ttgctgcgta ctaggggaca tgccatttgg tgttaaattg      2160

tctataataa agttcggttt ctcccaaaaa                                       2190
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<210> 129
<211> 1592
<212> DNA
<213> Rattus norvegicus

<400> 129
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gcgacagtga cttgcagctg gagagaatca atgtgtacta caatgaagct gctggcaaca       180

aatatgtacc tcgggccatc ctagtggacc tggagccagg caccatggac tcagtgaggt       240

cgggaccatt cggccagatc ttcaggccag acaactttgt gttcggtcag agtggtgcag       300

gaaataactg ggcaaagggc cactacacag agggtgccga gctggtggac tctgtcctgg       360

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cattgggggg aggcactggc tcaggcatgg ggaccctgct catcagcaag atcagagaag       480

agtacccaga ccgcatcatg aacaccttca gcgtcatgcc ctcacccaag gtgtcggaca       540

ctgtggtgga gccctataat gccacccttt ccgtgcacca gctggtagag aacacagacg       600

aaacctactg catcgacaac gaggctctgt atgacatctg cttccgcacc ctgaagctga       660

ccacacccac ctatggcgat ctcaaccacc tggtgtcagc caccatgagt ggagtgacca       720

cctgcctgcg cttccctggc cagctgaacg cagacctgcg caagctggct gtgaacatgg       780

tgcctttccc acgcctgcac ttcttcatgc caggcttcgc acctctgacc agcagggcca       840

gccagcagta ccgagccctg acagtgcccg agctcaccca gcagatgttc gactccaaga       900

acatgatggc tgcctgcgac ccacgccatg gccgctacct gaccgtagcc gccattttcc       960

ggggccgcat gtccatgaag gaggtggatg agcagatgct caacgtgcag aacaagaaca      1020

gcagctactt cgtggaatgg atccccaaca atgtgaagac ggccgtgtgt gacatccctc      1080

ctcgtggcct caagatgtcc gccaccttca ttggcaacag caccgccatc caagagctgt      1140
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147
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tcaagcgcat ctcggagcag ttcactgcca tgttccggcg caaggccttc ctgcactggt   1200

acacgggcga gggcatggac gagatggagt tcaccgaggc ggagagcaac atgaatgagc   1260

tggtgtctga gtaccagcag taccaggatg ccacggctga tgagcagggc gagttcgagg   1320

aggaggaggg tgaggatgag gcttgagttc ccaggccaag caggttaggg aaagctgagg   1380

cgaaaggagg gggtgggggt cttaatctgt gaaaatacct tggcagttgg aagaaggaga   1440

atggtcttag gtttgtgctg ggtctctggt gctcttactg ttgcctctca cttttttctc   1500

tttttgtaat atcgatgacg tgatgtgatg cttgagatct ttctgaactc ctgttgtgat   1560

ggctgaaatc gcctgaacct ttgtgtccta aa   1592

<210>   130
<211>   3043
<212>   DNA
<213>   Rattus sp.

<400>   130
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gaaacgcgga gcagattgtg ttggaaagct ggcaacagcg gtggtctcgg gcgcggcggg   120

agggcaggct gggtcggggg cgggcagtgt gtcgtcagga gctgggcggc cccgcggcgg   180

ccgcgtcttc ctagcccatc ccctcaagcc cagctcgggc tccggcgccc cagctccgac   240

cgtgcgctct cctgggtcaa gttagagccc accgagagcc ccgcgccact cgcgcactct   300

cgcacccggg cagaaggact gcggaagggg ccgccccacg ggctgggtga gggctgcagc   360

gtccagagaa ggaagcgttg acagctggag ccggctgctg gaagggtttg cgccgggacg   420

cgggggttgc cgtagcgcta cgcaagacgg ggcttaccct ctgaaaagca aacataagag   480

gctgtacaac caggttatct ctgcgatcag cctcaagcag agaagaaaga tggccaaaga   540

caagggcctc atcagcccag aagactttgc ccagctgcaa aagtacatag actactccac   600

caaaagtgtc agcgatgtgc tgaaggtctt tgagatgaac aaatattgcc aaggagatga   660

gattgggtac ctgggatttg aacagttcct gaaaatgtat ctggaagtgg aggaggttcc   720

ccatcaccta tgctggactc tgttttggtc cttccatagc agtcaagact tggatgagga   780

gactgagtca aaagccaatg tgatctgtct cagtgacgtc tactgctact tcaccctcct   840

ggaaggcggc agtccggaag acaagctaga gttcaccttc aagctgtacg acatggacag   900

aaatgggatc ctagacagca cagaagtaga aaaaatcatc ctgcaaatga tgagagtggc   960

tgaatatctg gactgggatg tgtctgagct gagaccgatc cttcaggaga tgatgaaaga   1020

gatggaccgg gatggcagtg gctgtgtctc cctagctgag tgggtccggg ctggggctac   1080

cactgtgccc ctgcttgtcc ttctggggat agacatgact atgaaagatg atggacacca   1140

tatatggaga cccaagagat tctccagacc ggtctactgc aacctgtgcg agttgagcat   1200

tggcctcggc aaacaaggcc tgagctgtaa cctctgtaag tacattgttc atgaccactg   1260
148

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tgccatgaag gcccagcctt gtgaagtcag cacctatgcc aagtctcgga aagacattgg    1320

tgtccagcca cacgtatggg ttcgaggagg ctgtcattct ggacgctgcg accgctgtca    1380

gaaaaagatc cggacctacc acagcctaac gggactgcac tgcgtgtggt gccacctgga    1440

gatccacgat gactgtctgc aggctgttgg tcccgagtgt gactgtggac tgctccgtga    1500

tcatatcctg cctccgtgtt ctatctaccc cagggtcctg gtatctggac aggagtgcaa    1560

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atggggaaga ggttatgaag gtgagaactt gagaaagatt ctcaaggata tagagataag    1980

taaggtggta tatctcgatc gatggctcct ggaagtgata ccccaacaaa acggagaaaa    2040

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gtccctcgaa ggcattgcgg tattgaatat cccgagcatg catggtggct ccaatctctg    2340

gggtgacacc aagagacctc acggggatac gtgtgggatc aaccaggcac tgggcagtgt    2400

ggccaaaata atcacagacc ccgatattct caaaacctgt gtgccagaca tgagtgacaa    2460

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tcccactatc tagatgctgc cacaccttcc tgccagccca gaaggatgtt ccatcacctt    2820

cacagtattt attatcctcc gccacctcac tgctcccaca cagacatcct tacacaacca    2880

gcgatgcgta accttgaaaa tgcctcatct aataaagtga cttttttccat cactgggata    2940

tctgttaaaa tgagcgacac atctctttt acaccttcac ccctctacag acagatttaa    3000

aagcagacag aacaaataaa tgaacaaaga aagcctaaaa aaa                       3043
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<210>   131
<211>   383

149

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<212> DNA
<213> Rattus sp.

<400> 131
ggagttaaaa ggtgtttaat gaggggaaga atattgaaca tatacttgtc ttattcccca   60

ccccattca gatgaatcct gagccatgga aagattagcc attcaatgag actttgggta   120

atgttgagtg gctcgagaac tcttgaggat gaggatgaga dacaacttt taggtggtgc   180

aaggatggag gattaagact ggaggtcaca gcatgtgtag cacaaggcaa tgggactcat   240

aagcaggatg gtaagcagcc tcagcatctg gtgatcagat cttcaggctt ggctatgggc   300

aatattactt ctgctttgtc ttctgctggt atggtgatgg agtggcagtt gggggggcagg   360

gctcatgaac aacaggctgg cat   383

<210> 132
<211> 672
<212> DNA
<213> Rattus sp.

<220>
<221> misc_feature
<222> (1)..(672)
<223> where n may be a or g or c or t/u, unknown, or other

<400> 132
caactaccag gattgcattt attataacag actgaaagtg caagccgaga gagaggtctg   60

agaagcagcg taaacacagg gagcactcct gaggaagctc agatgcactc cttcccaggg   120

actgcccctg aagaacaccc agccctcgga attaaggcag ttaggatgtg ggcactgttg   180

tgccaatatt ggtggtgttt tcacccagcc cctaccagct gtccctttct atccctccta   240

actggacatt attgagcttt ctccacgagt aatgctttcc cacacaaggc cacccagctc   300

aagaactttc cttccaggga cggttccagc caagtacctc aatgttaact attaactaca   360

gcaacaacca cccagagact gtggtttggg ggtactgccc acccccagga gctgccaaat   420

gtccaggcta ctgtgttcta accaaataga aacagagctc tacacttcag ttccacaacc   480

acttctggcc ctcactgagc cctgccaagt ccttactctg ccctacatgt attccctttt   540

cacacgaggc ctccaccctg cagacttaca gaaggccggg atatggtttg tgctccttcn   600

ctgcgggcct tacataaagt gctcagaatc agagattctt gcactgaatt gcagactccc   660

tcatgccgaa tt   672

<210> 133
<211> 367
<212> DNA
<213> Rattus sp.

<220>
<221> misc_feature
<222> (1)..(367)

150

<223> where n may be a or g or c or t/u, unknown, or other

<400> 133
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tacaaagtcg aaagggaata taaattacag ttttngtttt caacggatga tagtaaaaca     120

ctaccgtcag ctcaccacac acacaaacag cagcttttca atagagtctc ccaggcctcc     180

ctcaccaatg ctaaggactt aaaaaataaa aagtacagca ggctgcacat gctctctcac     240

ttcctcacaa tacacggata gctgtacact gaggtccatt gtacaggcat ctacagagta     300

agtacataaa atatatttgt aaaattcttc cacgcacgat cctacaatgt ctctcctcgc     360

aggatac                                                               367
```

<210> 134
<211> 2225
<212> DNA
<213> Rattus norvegicus

<400> 134
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catgtctttc ttgaagtcat ccagcatcat gatcaaatat gattttgaaa ctagatcttg     120

cttttctggt gtgtttggat attccatgtt tgttttggtg ggagaattgg gctccgatga     180

tggcatgtag tcttggtttc tgttgcttgg tttcctgcgc ttgcctctcg ccatcagatt     240

atctctagtg ttactttgtt ctgctatttc tgacagtggc tagactgtcc tataagcctg     300

tgtgtcagga gtgctgtaga ccttttttcc tctctttcag tcagttatgg gacagagtgt     360

tctgcttttg ggcgtgtagt ttttcctctc tacaggtctt cagctgttcc tgtgggcctg     420

tgtcttgagt tcaccaggca gctttcttgc agcagaaaat ttggtcatac ctgtgatcct     480

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ctgctgtccg tctcacgccc tcagctgtaa cagtgccgag ggagtcactg aagaagagac    1020

tgaatgacca gagtatgggc agcacagaca actcaacaaa aatgtcttca gaggtggaga    1080

ctgcggaggc cgtagatgag tcagagaaga actctatggc atcagagaag gaaaaccatt    1140

ccaaaatagc agactttctt gatcttctga aggaagggac aaaggaagca gatgaccggg    1200
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151

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cagaaaatac ccagtttgtc aaagacttct tgaaaggaaa cattaagaag gagctattta   1260

agctggccac cactgcactt tcatactcag cccctgagga ggaaatggat tcactgacca   1320

aggacatgga gtacttcttt ggtgaaaact gggaggaaaa agtgaagtgc tctgaagctg   1380

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acaatgctaa gcaattcaag ctattctact gcgctagatt gaatgccttg gacctgaatt   1620

tgaagaccaa agagaggatt gtggaggaag ccaccaaagc ctttgaatat aatatgcaga   1680

tattcagtga actggaccag gcaggctcca taccagtaag agaaacccta aagaatgggc   1740

tctcaatact tgatgggaag ggaggtgtat gcaaatgtcc ctttaatgct gctcagccag   1800

acaaaggtac cctgggaggc agcaactgcc ctttccagat gtccatggcc ttgctgagga   1860

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ggtactacat gtgaagggcc tgtcaagttg tttgcatcct atctcaacat cctaccactt   1980

gttccttccc cacctccacc tctgcctaga actaccacct caggtgacat ttttaatgtt   2040

gggtttgaga aaatgagcaa ccaataaaag acagaccccta gaaaaaagtc atgacttaag   2100

tggcacgggg acacctaaag tcacactttg tgcttcagac atactttctt tctctatttc   2160

aacactgaat tcgggaagta acctactact attaataata aatgctacac aatgcataat   2220

aaaaa                                                                2225
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<210> 135
<211> 467
<212> DNA
<213> Rattus sp.

<400> 135
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caaggtcaca cgtgatttaa tgtaggtggc aatgaaactg ggtttggtga gctacatcgt    60

taaaacggaa ggcagccttc ctagaatctc aatgcattgg cttaggagta agcaatactg   120

aaaaaagtta aagcatctgt tggcctcttt cccatcacag ggtacaacaa cctcttgtag   180

tcagcttcct ctacagtagg ctctaaagag ttcagcatga accaagatgg gaataatttg   240

gtgaccaaac tgcattttcc aaagtccttt tgtggcagaa tctagtaact tattgagctt   300

caggatggat ctagtttcct tttcttcagg tcctggctct tcctatgaga ttcagagttt   360

tctctgctac ctaggacatg ctgattagtg ctgcaggtct gcaggtgccc aggtccaggt   420

ttttcttgta ctttctggtg gcaatggata tgtgggacac tgtcctg               467
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<210> 136
<211> 822
<212> DNA
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152

<213> Rattus norvegicus

<400> 136
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gccgtgaaga agattgtgct gagtgacgca cgaagcatga agcacgcgct ccgagagatc   120

aaaatcatcc ggcgcctgga ccacgacaac atcgtcaaag tgtacgaggt actgggaccc   180

aagggtagcg atctgcaggg cgagctcttt aagttcagcg tggcttatat tgtccaagag   240

tacatggaga ctgacctggc atgcctgcta gagcagggca cgctgaccga ggagcacgct   300

aagctattca tgtaccagct gctgcgtggg ctcaagtaca tccactctgc caacgtgttg   360

cacagggacc tgaagcccgc caacattttc atcagcacgg aggacctcgt gctgaagatc   420

ggggatttcg ggctggccag aatcgcggac cagcattact cccacaaggg ttatctgtcg   480

gaagggttgg tgacaaagtg gtaccgctct ccacgactgc tcctgtcccc gaacaactac   540

acgaaagcca tcgatatgtg ggcagctggc tgcatcctag cggagatgct cacggggaaa   600

atgctctttg ctggggctca cgagcttgag cagatgcagc tcatcctaga caccatccct   660

gtagtgcggg aggaagacaa ggaggagctg ctcagggtga tgccgtcctt tgtcagcagc   720

acttgggagg tgaagaggcc actgcgtaag ctactcccgg atgtcaaccg tgaagccatt   780

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<210> 137
<211> 512
<212> DNA
<213> Rattus norvegicus

<400> 137
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aaaaaaatca gtgtttctaa tttcttggat tttcaacttt aagttccacg ttgacaaatc   120

tatttttatg tacacctttg attcttacat tacaacagaa gtcacatgtt taaaaatacc   180

cactccttaa aacatagtca ttgtcaatat tttgtttaca gtacagatcc tgaagacaaa   240

cacttgacta tattaagatt tattagtctg aaaacagaat gtaggatatt ttgtatatac   300

cgtcggtata tactgaattc tggcagcaaa gtgtttatga gaaaatttca attttccctg   360

gtagtataat ataaaggcca atctacttct cacttgttac aactatattt aactgaatta   420

tggtttaaaa tcacaaagtg ataaaatata aatacaaat actaagaaaa gtttaacata   480

taaagagaaa gtgtcttatg tattgtaatt tt   512
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<210> 138
<211> 451
<212> DNA
<213> Rattus norvegicus

<220>
<221> misc_feature

153

<222>    (1)..(451)
<223>    where n may be a or g or c or t/u, unknown, or other

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aataattgcg ccctctttgt ctgcacaatg gttccttgac atctaacgat tacagagtga       120

acatctaaaa gtagatgggg gcttactccg gcttaggaca tggtctcttg tgtacactca       180

atatgcacac ccagtaacac agacatagac cagagagggt ggctcccagg gcctcctggg       240

ctcccagcac caatgggaaa accttgccca tacacaggtg agttcctgac aactggagaa       300

cagagagatg caggccaggg ctccgcccca cccaccgcag ggccccgccc acctctggag       360

cagctccacc tttgttcacc ctggaaggca tctctttgga ttgcaaatac tttaattcac       420

agagggatg gggtangggc tggggtggtg t                                       451


<210>    139
<211>    3208
<212>    DNA
<213>    Rattus sp.

<220>
<221>    misc_feature
<222>    (1)..(3208)
<223>    where n may be a or g or c or t/u, unknown, or other

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ctgtcaaaga cctcctgtcc aatgaagact cagtggaaga tgtttctaag aagagcgaac       120

taattgttga tgttcaagaa gagaaagata cagatgctga agatggatct gaagttgatg       180

atgaaaggcc agcttggaac agtaagctgc aatacatcct ggcgcaagtt ggattttctg       240

taggtctggg gaatgtgtgg cggttcccat acctctgcca aaagaatggc ggtggtgcat       300

atcttttgcc atatttaata ctacttctgg tgataggaat tccactcttc ttcttggaac       360

tttctgtggg tcaaagaatt cggagaggca gcatcggggt ttggaattac ataagcccta       420

aactgggtgg gattggattc gcaagctgtg tagtgtgcta ttttgtggct ctctactaca       480

atgtcatcat tggctggaca ttgttttact tttctcagtc ttttcaacaa cctctccctt       540

gggatcaatg cccccctggtg aaaaacgcat ctcatactta tattgagcca gaatgtgaaa       600

aaagttctgc caccacttat tactggtacc gggaagcact ggctatcagc agctccatct       660

ctgaaagtgg gggcttaaac tggaagatga ctggctgcct gctggctgcc tgggtcatgg       720

tttgtctggc catgatcaaa ggcattcagt cctctggaaa aatcatgtat tttagttctc       780

tgttccccta cgtggtactt atatgcttcc taataagatc tctccttttta aatggttcaa       840

ttgatggcat ccgacacatg ttcacccccta agcttgaaat gatgctggag cccaaggttt       900

154

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ggagagaggc agcgactcaa gtcttctttg ccttgggttt gggatttggt ggagtcatcg    960

cgttttccag ttacaacaag agagacaaca actgccactt cgacgctgtc ctcgtgtctt   1020

ttatcaactt tttcacttca gtcctggcaa cactggtggt gttcgcagtt ctggggttca   1080

aagccaatat cgtaaatgaa aagtgcattt cacaaaattc tgagatgatc ttgaaacttt   1140

tgaaaacggg aaacgttagt tgggatgtca ttccccgtca catcaacctt tcagctgtca   1200

ctgcggaaga ttatcatgta gtttacgaca tcattcaaaa agtgaaggag gaggagtttg   1260

ctgttctcca tctcaaagcc tgtcaaattg aggatgagct aaataaagct gtgcagggca   1320

ctggcttggc tttcattgcc tttacagagg ccatgacaca ttttcctgca tctcccttct   1380

ggtcagtgat gtttttcctc atgctgataa atctcgggct cggcagcatg tttggaacca   1440

ttgaaggaat catcactcct gttgtggaca cattcaaagt gaggaaggaa atactcaccg   1500

ttatctgttg cctcctagca ttttgtatcg gcttgatgtt tgtgcagcgc tctggaaatt   1560

acttcgttac aatgtttgat gattattctg ccacattgcc tctgttaatc gtggtcatct   1620

tggagaatat tgctgtaagc ttcgtttacg gcatagataa gtttctagaa gacctaacag   1680

acatgttagg atttgctcca agcaaatatt actattacat gtggaaatac atttctcctc   1740

taatgctagt aacattgtta atagctagca ttgtgaatat gggattaagt cctccgggat   1800

ataatgcatg gatcaaggag aaggcatccg aagaatttct gagctacccg atgtggggga   1860

tggtggtctg tttctctctg atggtgctgg ctatacttcc tgtcccagtc gttttcgtca   1920

ttcgtcgctg caacctcata gatgatagtt ctggtaactt ggcctctgtg acctataaga   1980

gaggaagagt cctgaaagaa cccgtgaact tagacggaga tgatgcaagc ctcattcacg   2040

gaaagatacc aagtgaaatg tcgtctccaa attttggtaa aaatatctat cgaaaacaga   2100

gtggttctcc gaccctggac actgctccca atggacgcta tgggattggg tatttgatgg   2160

cagatatgcc agatatgccc gagtctgact tgtagctgag tgaaagcaaa gggttgagct   2220

tggttcattt ttatcaatga gcattggttc tactatgaga agcagtgagc ttcacttgtc   2280

acaaggtgat ctcaggtgtc catagccgcc atctttaatc tcaacagttt aagacagttc   2340

cagaagagca atcctcagtt tacaattaca aagtaacaat tgcagacaaa gcttacattg   2400

actggggtcc tttgccagga tttttttaaa aagcactttg acatactttc aagtatttct   2460

atctcttaaa aaaaaggtgt tacctcagtt tctaatagtt tccggattta atattattgg   2520

cgatttgaaa aaaaatccct gttatatctt acaattcata attttgcctt cggagtaagt   2580

tccagtatta ccatgaacag ttgtgtgtga gcgggtgctt ctcagcacat tgccatgagt   2640

acgttctgta gatagcctgt acttatcttt ggtagcattg aaaccttagg cacttagttg   2700

gagaaaactt caaagtattt tcttatatga tagccgtcta gagcaatagt attaaagagt   2760

aaaaaggcac tgatggtgga tgagaggtta agtccagatg tgatcgaggg tttcctggag   2820
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155

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tggccatata ttttgtgtaa aataggtgtg tgcaaatgat tgaagggact ctcgagaatt    2880

atgcagactg catttttctt atgccgtgtg cctaataaac ctacttaata tttattgtgg    2940

ttttgagatc acttatagta tatttatata atatacttgc aatgtataga gatgcgcatc    3000

aggactctta agtgctggtt tgaaaacttg aagcaagata gcatctgatt tcatatgttt    3060

ctgttttgct tcattttatg caaatacgaa ttcttttttt taagtgattg ttaaaactgt    3120

atggcattac attttaacct acaaataaac gaagtttanc aaaaaaaaaa aaaaaaaaaa    3180

aaaaaaaaaa aaaaaaaaaa aggaattc                                       3208


<210>   140
<211>   436
<212>   DNA
<213>   Rattus norvegicus

<400>   140
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tcaataagca aacaaccata aaaacatggt gcgtccgcac cactcagcag ggaagtcatg     120

caatttctgg aacagagcac aaggtattac actgagtgag agcatctcca atgcttctgt     180

caacacgctt ccatctcagc gctgcagagc tggaggagag ttggtatggt agcgaggtat     240

gaagagttag gtggtagtga ggcagctggg tgactataag acagaatcaa cgggccctct     300

ggagtactga gctcgttcta tacattggtc atacataatt gcatgaatcg gcacacatga     360

taaaatagca cgaagccaca tacatactgt tccaattaac aagtccttgc ttttgatatg     420

ttacaccata tgttct                                                     436


<210>   141
<211>   636
<212>   DNA
<213>   Rattus sp.

<220>
<221>   misc_feature
<222>   (1)..(636)
<223>   where n may be a or g or c or t/u, unknown, or other


<400>   141
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atgctagttt ctccctgagc ctcgatacag aacagacaga agtcacagga ggttcatctc     120

acaacaggca tgtcactgaa atactaggat ttttttttttc aatacgatca gttagaaata    180

cacacaaatt acttaaagaa agaagaggag gaagagggga agagaaagag aaagagaaag     240

agaaagagaa gaagaggcca gacaggagct cagccacttg tccaagagca gctgggtccc     300

cccaacaggc tcaaccgctg aggggcctga cgttagctat cagcccctga cctgctcaga     360

caacacacgg ttgtacaaca tggtctagtg accggcaaaa ggaagaagcc accccacaga     420
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cacacatata cacaaagctg attgatactg gatttacaag cacatcccgt cacacggcaa      480

gaccaagaca gatcggggta ggggtgagaa gacaccaana cacaggaatt tcaaaggcca      540

aacacctgtc cataaaggga ggcgagggac gagaaatgcc gtgggagaag gggagaagga      600

tgaacagatc tctgtagcca aaacagaaca gagtgg                                636


<210>   142
<211>   437
<212>   DNA
<213>   Rattus sp.

<400>   142
acaaaaataa atgtagtctt tattaccaag taataaaata gaagccataa ttaactatag       60

cgtagggcag caggatgagg tgattaaatg aataatgtta cattgtcttg gggggaaact      120

aggttttcag aattacagtg tctggaattt tagtgcttaa aaaaaaaaaa catattttag      180

gaggaataag gaactggtag aacaaggaaa tggcttaact aatctgagtt aagagcacct      240

ctgagggcca catggtctgt aatcacagct ccagaggctg aaaaacagga gatctacagt      300

ttaaggtcag ccatggctag gctgaatctg ttgtctgttt aaagagcacc aagaaattcc      360

ctggtcaaac gagagcttct ggtgaaagac taaaggaatg gcagtaagga catagaagtg      420

gctccttgcc tcgtgcc                                                    437


<210>   143
<211>   592
<212>   DNA
<213>   Rattus sp.

<400>   143
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aagaccttcg atcagctaag cccggacgag agcaaggaga ggctggggaa aattgttgat      120

cgaatcgaca gtgatggaga cggccttgtt actactgagg agctgaaagt ttggatcaaa      180

cgggtacaga aaagatacat ctacgataat gtggctaaag tctggaagga ttatgatagg      240

gacaaagacg aaaagatctc ctgggaagaa tacaagcagg ccacctatgg ctactacctg      300

ggaaaccctg ctgaattcca agatagctct gatcatcaca cctttaaaaa gatgctgcca      360

cgggatgaga ggaggtttaa ggcttcagac ctcgatggcg acctgacagc tactcgggag      420

gagttcactg cctttctgca cccagaggag tttgaacata tgaaggagat tgtagttctg      480

gaaaccctgg aggatatcga caagaacggg gatggttttg tggaccagga tgagtacatt      540

gcggacatgt tttctcacga ggacaatggc cctgagccag actgggtttt gt            592


<210>   144
<211>   3027
<212>   DNA
<213>   Rattus norvegicus
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157

<400> 144

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gcttcaggct gagcggatgt ctcttctcct cagtttcgga ctcagagaca cgcggctccc   180

tactcctgct gatcacgaag tccttgaagg cgctcaacgc accggaatct cccagcggcc   240

gcgaccgccg cctcggccct gctctccgcg cgccggaac tcagcgtgat ctgcggcggc    300

cgtctaggag gttcacaaaa atggcgaaga gagttgcgga gaaggaatta acagatagga   360

attgggatga agaagatgaa gttgaagaga tgggaacatt ctcagtggcc agtgaggaag   420

tcatgaagaa cagagccgtg aagaaggcaa agcgtaggaa tattggcttt gaatctgata   480

gcggaggagc ctttaaaggt ttcaaagggt tggttgtgcc ttctggagga ggagggtttt   540

ctggatttgg tggtggctct ggagggaagc ctctggaagg actgacaaat ggaaacagca   600

cagacagtgc cacgcccttc tccagtgcaa agacagcagc ggagcctaag gcagcctttg   660

gttcttttgc tgtgaatggc cctactactt tggtggataa aaagatctcc agtcctaaat   720

gcaatagcag caatcagccg ccctcctccg gcccagcctc cagtacctcc tgcactggga   780

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attcaccatt ttcatttcat ggcaacaaag cggaggacac atctgaaaag ttggagttta   1080

cagcagaaaa gaaatcggac gcagcacaag gagcaacaag tgcctcgttt aattttggca   1140

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tctctcctgg aaactctagt ttatttggta aagatgctgc ccagagtaaa gcagcctctt   1260

caccgttttc tgctaaagca tccgagagtc aagcaggagg cagcagcagt gagtgcagag   1320

atggtgaaga agaggagagt gatgagccac ccaaggtggt ggtgactgaa gtgaaggaag   1380

aggatgcttt ctactccaaa aaatgtaaac tattttacaa gaaagacaat gaatttaaag   1440

agaagggtgt ggggaccctg catttaaaac ccacagcaac tcagaagacc cagctcttgg   1500

tgcgggcaga caccaaccta ggcaacattc tgctgaatgt tctgatccca cccaatatgc   1560

cgtgcacccg gacagggaag aacaatgtcc ttatcgtctg tgtccccaac cccccacttg   1620

atgagaagca gcccactctc ccggtcacca tgctgattcg ggtgaagacg agcgaggatg   1680

ctgatgagtt gcacaagatt ttactgcaga aaaaggacgt ctgagcactg aggctgacca   1740

gggcacgtca ccatgttgct gcttcccttt gcccctaaac ttagtcacat tctttcctct   1800

ttgtactgtg acattctgag aacttctagg taacttgaaa cttttgtgag gaagattaag   1860

gccaataaat cctttcagtg tgtcgaagct gttctccctt cctaagaact aagcaaaata   1920
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158

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cattggagtg aaaagtttgg gaagattttt taatgtcgat tcattgagta aactaaccta    1980

agtgattctt acggactgta atcagggtac cagttagctc tccaaaggct ccctcaggca    2040

gccacgggtg ccactctctt cctgccctgg gagactcaat ggcagtgtcc acagagttcc    2100

agaagacgcc tgctcccctc ctgtgggctt gtttggtccg tgactagcac tcctgccaaa    2160

taccacaccg gcacactgta accgcgcttg ttctgtttcc ttctgagcgg aactgtgggt    2220

cctggggatc tctgtcctta gcctgttttt gacaggtgct ggcctttgac ctggaactgc    2280

ttgactgaac caggcactgc ctttccatgg gaagagaggg caggtagtgg cttgtcgggg    2340

agctggcgag gtatagactg ggttttgtcg tttatccatg aggtgctctt acttgcttac    2400

ctccctagtt aacatggatg ggggctgtca ggaataatgg attttattaa aagcacaaat    2460

ttggtagcat tttttaaata tcatttctat accacaaaca agcctttatt ttaaaagaaa    2520

aaagtgaaat tgtgctgaaa agggttgtat gctcgtggcc gtttgtgccc cggggacctg    2580

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gagagccatg gttctacacg ccattcatgc cacttgagag cggtgaggtt accgatacta    2820

gcattctctc aaggccagac atcagttaaa tgcaaggttt gttgacgagc tggtcacggc    2880

tccctcctaa ccccagtgcc ggaaagctga ggcaggaaga ccgtgtgagt tcacaacagc    2940

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aaaaaaaaaa aaaaaaaaaa aaaaaaa                                        3027


<210>   145
<211>   535
<212>   DNA
<213>   Rattus norvegicus

<400>   145
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gttcggagga catggggact acagtcaatg gagatgtgtt tcaggaggct aacgggcctg    180

ccgatggcta cgctgcgatt gcccaggcgg acaggttgac tcaggagcct gagagcatcc    240

gcaagtggag agaggagcag aagaaaggc tgcaggagtt ggatgctgcc tcgaaggtga    300

ccgaacagga gtggcgggag aaggccaaaa aagacctgga ggagtggaac cagcgccaaa    360

gtgaacaggt tgagaagaac aagatcaaca acagggcatc ggaagaggct tttgtgaaag    420

aatccaagga ggagacccca ggcacagagt gggagaaggt ggcccagctg tgtgacttca    480

accctaagag cagcaagcaa tgtaaagacg tgtcccgcct gcgctcggtg ctcat          535
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<210> 146
<211> 2046
<212> DNA
<213> Rattus norvegicus

<400> 146
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ccaggcccgg ccccagctgc cgctgcggag cccgccggga ggccccggag cgcggccaca   120

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tcctcgagtg cctcaatgag cagcggctac agggactgta ttgtgacgtg tcagtggtgg   240

taaagggcca tgccttcaaa gcccaccgtg ctgtgttggc cgccagcagc tcctacttcc   300

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agtcattcca gcagatcctc acgttttgtt atacaggccg gctgagcatg aacatggggg   420

accagttcct gctcatctac acagccggct tcctgcagat ccaggagatc atggagaaag   480

gcactgagtt cttcctcaaa gttagctctc caagttgcga ctcccagggc ctgcacccgg   540

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gtagcacgcc actgcccctt gtgtcacggg tcaagacaga acaggagttg gactcggtgc   660

aatgcacacc catggccaag aggctatggg atagcagcca gaaggaagct ggaggcagtg   720

gtggcaacaa tggcagccgc aagatggcca agttctccac gccagacctg gcccctaacc   780

ggatgcccca gccagtctct gtggccacag ctacagcagc agtggctgtg gttgcagtgg   840

ggggatgtgt gagtgggccc agcatgtcag agcggaccag cccaggtacc tccagtgctt   900

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agccactgga cagtcgtgtc ctccatgctg tcaagtacta ctgccagaac ttcgccccca  1440

acttcaagga gagcgagatg aatgccattg cagccgacat gtgcaccaat gcccgccgag  1500

tggtccgtaa aagctggctg cccaagacca agccgctaca cctggtggag ggcgataact  1560

acagcagctt catcagcgac actggcaaga tagaaccgga catgatgagc atggaacaca  1620

gcttcgagac agccagccac gatggcgagg ctggcccttc agctgaggtt ctccagtaac  1680

atacatgtga cacccccttta ccggatgtca cattcccccct cctatcacac ccccacctac  1740
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160

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cacctacctg gtcacgatct actgtctgtc cctccccaga acctgtgagg gggtgttcag   1800

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<213>  Rattus norvegicus

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agtcttggac gcagaacaga tcaataccga tgcctccaaa atggaggatt ctgtctccgc    180

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161

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aacccaataa ccaactattt tcatttttat ttaaaaaatg agaaagaaa gaggattttc    2040

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163

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ccacaaacct caataaattc ctatattaca aattgggcta atctatagac ccatagatga   240

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<213> Rattus norvegicus

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166